

WHAT IS CLAIMED IS:

1. A transcoding proxy capable of transcoding encrypted content, like an encrypted multimedia message or a multimedia message containing encrypted elements parts, transmitted between two devices by performing the following steps:

receiving an encrypted multimedia message from a first device;
requesting and receiving a message which enables the performance of the following steps:

decrypting the encrypted multimedia message;
transcoding the decrypted multimedia message so the multimedia message matches the capabilities of second device and can be accessed by a user of said second device; and

re-encrypting the transcoded multimedia message;
and

sending the re-encrypted transcoded multimedia message to the second device.

2. The transcoding proxy of Claim 1, wherein said message is a transcoding rights object (TRO) message that includes at least a content encryption key (CEK), and optional permissions for transcoding the multimedia message.

3. The transcoding proxy of Claim 2, wherein said CEK is an encrypted CEK.

4. The transcoding proxy of Claim 2, wherein said permission for transcoding the multimedia message is implicit with the provisioning of the CEK.

5. The transcoding proxy of Claim 1, wherein:
said first device is a mobile phone; and
said second device is a mobile phone.
6. The transcoding proxy of Claim 1, wherein said multimedia message is one or any combination of text, image, audio or video.
7. The transcoding proxy of Claim 1, wherein said transcoding proxy is a Multimedia Messaging Service Center (MMS-C).
8. The transcoding proxy of Claim 1, wherein said transcoding proxy contains an OMA DRM compliant/licensed entity trusted by a rights issuer.
9. The transcoding proxy of Claim 1, wherein said encrypted multimedia message includes a multimedia message containing encrypted elements parts.
10. The transcoding proxy of Claim 1, wherein said transcoding proxy is an Open Mobile Alliance's (OMA) Digital Rights Management (DRM) compliant entity and said message is a rights object (RO) message.
11. A method for transcoding encrypted multimedia messages transmitted between two devices, said method comprising the steps of:
receiving an encrypted multimedia message from a first device;
requesting and receiving a message which enables the following steps:
decrypting the encrypted multimedia message;

transcoding the decrypted multimedia message so the multimedia message could be accessed by a user of a second device;
re-encrypting the transcoded multimedia message;
and

sending the re-encrypted transcoded multimedia message to the second device.

12. The method of Claim 11, wherein said message is a transcoding rights object (TRO) message that includes at least a content encryption key (CEK), and optional permissions for transcoding the multimedia message.

13. The method of Claim 12, wherein said CEK is an encrypted CEK.

14. The method of Claim 12, wherein said permission for transcoding the multimedia message is implicit with the provisioning of the CEK.

15. The method of Claim 11, wherein:
said first device is a mobile phone; and
said second device is a mobile phone.

16. The method of Claim 11, wherein said multimedia message is one or any combination of text, image, audio or video.

17. The method of Claim 11, wherein said message is a rights object (RO) message.

18. The method of Claim 11, wherein said encrypted multimedia message includes a multimedia message containing encrypted elements parts.

19. A system for providing a Multimedia Messaging Service (MMS), said system comprising:

a content provider for providing an encrypted multimedia message to a first device;

a rights issuer for providing a content encryption key (CEK) to said first device so that a user of said first device can access the encrypted multimedia message;

a transcoding proxy for receiving the encrypted multimedia message from said first device;

said transcoding proxy for requesting and receiving a transcoding rights object (TRO) message from said rights issuer;

said transcoding proxy for using the TRO message to perform the following steps:

decrypting the encrypted multimedia message;

transcoding the decrypted multimedia message so the multimedia message could be accessed by a user of a second device; and

re-encrypting the transcoded multimedia message;

said transcoding proxy for sending the re-encrypted transcoded multimedia message to the second device; and

said rights issuer for providing a content encryption key (CEK) to said second device so that the user of said second device can access the re-encrypted transcoded multimedia message.

20. The system of Claim 19, wherein said transcoding proxy is a trusted entity.

21. The system of Claim 19, wherein said rights issuer can authenticate and authorize said transcoding proxy.
22. The system of Claim 19, wherein said TRO message includes a content encryption key (CEK) and permission for transcoding the multimedia message.
23. The system of Claim 22, wherein said CEK is encrypted with a shared secret between said rights issuer and said transcoding proxy.
24. The system of Claim 22, wherein said CEK is encrypted with a public key associated with said transcoding proxy.
25. The system of Claim 22, wherein said permission for transcoding the multimedia message is implicit with the provisioning of the CEK.
26. The system of Claim 22, wherein said permission for transcoding the multimedia message is expressed by using a Rights Expression Language or a Rights Expression Language Extension or another machine readable signaling.
27. The system of Claim 22, wherein said transcoding permission message specifies which transcoding is permitted and whether consecutive transcoding is allowed in said transcoding proxy.
28. The system of Claim 19, wherein said transcoding proxy uses an Uniform Resource Locator (URL) of said rights issuer to request the TRO message from said rights issuer.

29. The system of Claim 19, wherein said TRO message is sent from said rights issuer to said transcoding proxy over an unprotected channel.

30. The system of Claim 19, wherein said TRO message is sent from said rights issuer to said transcoding proxy over a secured channel.

31. The system of Claim 19, wherein:

said first device is a mobile phone; and

said second device is a mobile phone.

32. The system of Claim 19, wherein said multimedia message is one or any combination of text, image, audio or video.

33. A method for transcoding encrypted multimedia messages transmitted between two devices, said method comprising the steps of:

providing an encrypted multimedia message from a content provider to a first device;

providing a content encryption key (CEK) from a rights issuer to said first device so that a user of said first device can access the encrypted multimedia message;

receiving, at a transcoding proxy, the encrypted multimedia message from said first device;

receiving, at the transcoding proxy, a transcoding rights object (TRO) message that was requested from said rights issuer, wherein said transcoding proxy uses the TRO message to perform the following steps:

decrypting the encrypted multimedia message;

transcoding the decrypted multimedia message so the multimedia message could be accessed by a user of a second device; and

re-encrypting the transcoded multimedia message;
sending the re-encrypted transcoded multimedia message from said transcoding proxy to the second device; and
providing a content encryption key (CEK) from said rights issuer to said second device so that the user of said second device can access the re-encrypted transcoded multimedia message.

34. The method of Claim 33, wherein said transcoding proxy is a trusted entity.

35. The method of Claim 33, wherein said rights issuer can authenticate and authorize said transcoding proxy.

36. The method of Claim 33, wherein said TRO message includes a content encryption key (CEK) and permission for transcoding the multimedia message.

37. The method of Claim 36, wherein said CEK is encrypted with a shared secret between said rights issuer and said transcoding proxy.

38. The method of Claim 36, wherein said CEK is encrypted with a public key associated with said transcoding proxy.

39. The method of Claim 36, wherein said permission for transcoding the multimedia message is implicit with the provisioning of the CEK.

40. The method of Claim 36, wherein said permission for transcoding the multimedia message is expressed by using a Rights Expression Language or a Rights Expression Language Extension or another machine readable signaling.

41. The method of Claim 36, wherein said permission for transcoding the multimedia message specifies which transcoding is permitted by said transcoding proxy and whether consecutive transcoding is allowed in said transcoding proxy.

42. The method of Claim 33, wherein said transcoding proxy uses an Uniform Resource Locator (URL) of said rights issuer to request the TRO message from said rights issuer.

43. The method of Claim 33, wherein said TRO message is sent from said rights issuer to said transcoding proxy over an unprotected channel.

44. The method of Claim 33, wherein said TRO message is sent from said rights issuer to said transcoding proxy over a secured channel.

45. The method of Claim 33, wherein:
said first device is a mobile phone; and
said second device is a mobile phone.

46. The method of Claim 33, wherein said multimedia message is one or any combination of text, image, audio or video.

47. A device capable of sending an encrypted multimedia message to a transcoding proxy which requests and receives a message that enables the

transcoding proxy to decrypt the encrypted multimedia message, transcode the decrypted multimedia message and re-encrypt the transcoded multimedia message before forwarding the re-encrypted transcoded multimedia message to another device.

48. The device of Claim 47, wherein said message is a transcoding rights object (TRO) message that includes a content encryption key (CEK) and permission for transcoding the multimedia message.

49. A device capable of receiving and playing a re-encrypted multimedia message from a transcoding proxy that had received an encrypted multimedia message from another device and then requested and received a message that enabled the transcoding proxy to decrypt the encrypted multimedia message, transcode the decrypted multimedia message and generate the re-encrypted transcoded multimedia message that was sent to the device.

50. The device of Claim 49, wherein said message is a transcoding rights object (TRO) message that includes a content encryption key (CEK) and permission for transcoding the multimedia message.